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jc712 U.S. PTO
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By Express Mail #EL331511719US

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Check box if applicable: ☐ *DUPLICATE*

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09/513964
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UTILITY PATENT APPLICATION TRANSMITTAL

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Assistant Commissioner for Patents
BOX PATENT APPLICATION
Washington, DC 20231

Dated: February 28, 2000

Sir:

Transmitted herewith for filing is the utility patent application of:

Inventor(s): Stephan MEYERS

For: Cache Device And Method For Generating A Virtual Radio Or Television Broadcast

Enclosed are:

- Transmittal letter **(2x)** with Fee Computation Sheet
- General Authorization For Payment of Fees **(2x)**
- Title Page, Specification, Claims 1 to 40 & Abstract (24 pages)
- Unexecuted Declaration and Power of Attorney (2 p.)
- 4 sheets of drawings (Figs. 1 to 4)
- Check for **$1284** for filing fee
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[] Please charge my Deposit Account No. 03-2412 in the amount of $. A duplicate copy of this sheet is enclosed.

[x] The Commissioner is hereby authorized to charge payment of the following fees associated with this application or credit any overpayment to Deposit Acct. No. 03-2412.

[x] Any additional filing fees required under 37 CFR 1.16.

[x] Any patent application processing fees under 37 CFR 1.17

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[x] The issue fee set in 37 CFR 1.18 at 3 months from mailing of the Notice of Allowance, pursuant to 37 CFR 1.311 (b) provided the fee has not already been paid by check.

[x] Any filing fees under 37 CFR 1.16 for presentation of extra claims.

[] Priority is claimed for this invention and application, corresponding applications having been filed in on , No. , on , No. , on , No. , on , No. , on , No. , on , No. , respectively.

Respectfully submitted,
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D95.1654.02800

By Express Mail # EL331511719US

APPLICATION FOR UNITED STATES

LETTERS PATENT

09571964 - 022606

CACHE DEVICE AND METHOD FOR GENERATING A VIRTUAL RADIO OR TELEVISION BROADCAST

Inventor(s):

Stephan MEYERS

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to the generation of an individually-targeted virtual radio or television broadcast.

2. Description of the Related Art

Users of the Internet may listen to and/or view multimedia content available on the Internet, but must either play or download to a digital audio player the individual items of content, such as a video or song, which must be specifically selected. Forcing the user to select the specific videos and songs for download eliminates the excitement and surprise of a seamless broadcast where one can experience a mix of not only videos and songs but also other information such as traffic, weather, and DJ introductions to songs, and where one may also be exposed to new music. An Internet user can alternatively listen to programmed channels of entertainment and information broadcast over the Internet, but those broadcasts, as in radio and television broadcasts target large audiences and are not responsive to the specific needs and desires of each individual listener.

Advertisers on radio and television target certain demographic audiences who they believe are potential or actual consumers for their products based on the content of the broadcast. However, none of the broadcast media are able to customize the broadcast and advertising by individual rather than groups, primarily due to limitations of the various forms of media. Existing radio and television broadcasts simply do not permit customization of content or advertising.

Moreover, they only operate when the receiver is able to receive the signal and their sphere of influence is generally local, rather than international, although networks of stations may broadcast the same content. On the Internet, advertisers currently target the users of particular Web sites rather than a particular individual. It would be advantageous if advertisers could target advertising to an individual directly during a broadcast rather than trying to reach these individuals via a "canned" broadcast that may or may not reach the appropriate consumer.

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SUMMARY OF THE INVENTION

It is an object of this invention to provide a method for generating an individually-targeted broadcast from data comprising audio and/or visual content and other information intermittently downloaded to a device where the content can be automatically organized and formatted into the individually-targeted broadcast.

It is a further object of this invention to provide a method for generating an individually-targeted broadcast where the downloaded content is interspersed with recorded or synthesized speech for introductions to the content and with advertising.

Accordingly, a method for generating a virtual broadcast is practiced on a device, which may be generically referred to as a "virtual broadcast device", that is connected, usually only periodically, to the Internet. One such virtual broadcast device is a mobile phone that offers wireless Internet connectivity. During an Internet session, a user visits a Web site containing content and other information suitable for inclusion in the virtual broadcast and downloads selected audio and/or video content (such as music or videos) and other information (*e.g.*, DJ introductions to the music, traffic, news, weather) to the device in any order. Advertising may also be downloaded. The type of content and other information downloaded, such as the style of music, can be selected by the operator of the Web site or by the user based on user preferences. The data is organized on the virtual broadcast device into the virtual broadcast according to a selected algorithm resident on the virtual broadcast device. The virtual broadcast may then be played on the virtual broadcast device, if provided with play capabilities, or on another player device. Particular selections in the virtual broadcast may be marked as favorites for more frequent play or marked for deletion. User rankings or ratings of selections in the virtual

broadcast may be uploaded to the Web site to influence future downloads of content for inclusion in the virtual broadcast.

In accordance with a first aspect of the invention, a virtual radio broadcast is created comprising songs introduced by disk jockeys and interspersed with advertising, and reports on traffic, stocks, etc. Particular selections in the virtual broadcast may be marked as favorites for more frequent play or marked for deletion. User rankings or ratings of selections in the virtual broadcast may be uploaded to the Web site to influence future downloads of content for inclusion in the virtual broadcast.

In accordance with a second aspect of the invention, a virtual television news broadcast is generated by downloading news stories and other information from a Web site and organizing the news stories and other information into a broadcast format. By periodically connecting to the Internet after the initial download, one or more additional news stories may be downloaded from the Web site and incorporated into the virtual broadcast in order to keep the broadcast current. Older news stories may likewise be dropped from the broadcast.

According to either aspect of the invention, rather than connecting to a Web site to download data containing content, other information, and advertising, the data may be captured from a subsignal broadcast from a conventional broadcast device, such as a radio or television transmitter. The user may then provide user information, such as rankings or ratings, to the source of the subsignal, either by a later Internet connection or other means, to influence the broadcast data.

Other objects and features of the present invention will become apparent from the following detailed description considered in conjunction with the accompanying drawings.

It is to be understood, however, that the drawings are designed solely for purposes of illustration and not as a definition of the limits of the invention, for which reference should be made to the appended claims. It should be further understood that the drawings are not necessarily drawn to scale and that, unless otherwise indicated, they are merely intended to conceptually illustrate the structures and procedures described herein.

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BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings wherein like reference numerals denote similar elements throughout the several views:

FIG. 1(a) is a block diagram illustrating one method for transferring data to a device for practicing the invention;

FIG. 1(b) is a block diagram illustrating a second method for transferring data to a device for practicing the invention;

FIG. 2 is a plan view of one device which may be used for practicing the invention;

FIG. 3 is a flow chart of the algorithm for downloading content and forming the broadcast according to a first aspect of the invention; and

FIG. 4 is a flow chart of the algorithm according to a second aspect of the invention.

DETAILED DESCRIPTION OF THE PRESENTLY PREFERRED EMBODIMENTS

Referring to FIGS. 1(a) and 2, a device 10 utilizing the present invention creates a virtual broadcast using data files containing content and various other information for the broadcast downloaded from a Web site (or multiple Web sites) on the Internet (World Wide Web (WWW)) 20. Device 10 is preferably a portable device which is handheld, mounted in a car, integrated into a mobile phone, or is otherwise portable, and has a digital audio player with a high capacity storage device. The device 10 has a port 24 over which the data is downloaded, a memory 25 in which the downloaded data is stored, a processor 27 for processing the downloaded data into the virtual broadcast, a display 30 where various information, such as song titles and artists or menu selections, can be displayed, and buttons 40 for selecting functions, the buttons being either dedicated to a particular function such as play, skip, repeat, move forward or backward, etc. or serving different functions depending on the menu displayed on display 20. An MP3 player with a large capacity hard disk and appropriate software would be one suitable device, but the invention is in no way limited to being practiced on an MP3 player. (Where device 10 is an MP3 player, the MP3 player may require the replacement of the ROM to install enhanced software with the capabilities described below.) Another suitable device for device 10 would be a PC with a modem but it would lack the advantages of a portable device, unless it were a lightweight laptop computer. To view a virtual television broadcast, device 10 may have a separate video screen 50, which is unnecessary for users desiring audio broadcasts only or where screen 30 is of a screen type suitable for viewing videos.

The connection between device 10 and the Internet 20 may be either wired or wireless and either constant or intermittent. Where the Internet connection is wireless, the files may be downloaded gradually, a little at a time, at cheaper, bulk bandwidth rates. Or, rather than using the Internet to download the files, the files may be transmitted over a digital subsignal of a conventional broadcast, such as transmitting digital music and other information on a digital subsignal of a conventional AM or FM radio broadcast or transmitting videos and other information over a subsignal of a conventional television broadcast (FIG. 1(b)) and captured by an antenna (not shown) on device 10.

Where files are downloaded from the Internet, the data to be used in the virtual broadcast is loaded onto device 10 as follows: Referring to FIG. 3, at step 100, a first-time user goes to a Web site where data files containing digital audio and/or visual "content", such as music, videos, news stories, or similar items which form the substance of a conventional radio or television broadcast, are available. At step 110, the user enters user information, which may include registration information required for membership on the Web site (such as payment information if the Web site is not free), and selects a format recognized by the user's virtual broadcast device in which to download the information. The user may also select the available optional user preferences as to what type of content is desired, *e.g.* classical or pop music, songs from a particular decade, etc., or the content type may be selected by the Web site server. For example, the Top 40 songs may be selected for download. As yet another option, the user may not need to specify any preferences, instead having device 10 maintain an internal ranking of the

user's preferences which can be communicated via a control on device 10. The Web site would then select the content of the virtual broadcast based on the specified criteria.

At step 120, one or more files containing content of the type preferred by the user or selected by the Web site are downloaded into memory 25 in a format that is compatible with device 10 and are preferably encrypted to prevent illegal copying. A record may be kept of the downloaded content in order to pay any required royalties. Also downloaded at step 120 is "information" other than content, including information about the downloaded content, that may optionally be integrated and interspersed into the virtual broadcast, as described below, between various items of content to enhance the user enjoyment of the virtual broadcast. The information about the content may include DJ (disk jockey) introductions for each song in a virtual radio broadcast or VJ (video jockey) introductions for each video in a virtual television broadcast. The DJ introductions could be prerecorded by an announcer or created using synthesized speech. The information may also include weather reports, the time, stock quotes, and traffic reports. For example, weather reports interspersed into the broadcast at certain intervals could be created using phrases such as "Sunny" or "Partly cloudy". The effect of a live broadcast may be best simulated where all of the information, including song introductions, weather reports, etc. is prerecorded in the same DJ's voice. More than one announcer could prerecord the same introduction so a user could choose from a selection of different DJ voices.

A rating system that cross-correlates the preferences of different users is provided by the server. This rating system looks for patterns in the musical preferences of different users

and suggests to the user music that he might like, based on the preferences of users with similar profiles.

Advertisements (appropriate to the particular media, audio for a virtual radio broadcast and video for a virtual television broadcast) may also be downloaded at step 120 along with the content and other information to be integrated and interspersed within the virtual broadcast in order to subsidize the operating expenses of the Web site and to defray the cost of royalties the Web site operator must pay to copyright owners. These advertisements can be individually targeted based on user information that is supplied at step 110. The user information can then be used along with the selection of content-preferences to select individually-target advertisements for download along with the content. The user may be permitted to specifically select the type of advertising downloaded. The content, information, and advertising need not be downloaded in any particular order because the broadcast is organized by software loaded on device 10.

Once the files are downloaded from the Web site, software in device 10 organizes the mix of downloaded content, information and advertising into a virtual broadcast according to an algorithm which may be selected by a user or some other means. This organizing of a virtual broadcast may be referred to as "generative broadcasting." For example, where audio is downloaded, the virtual broadcast has the format of a customized radio broadcast. As in a conventional radio broadcast, for example, a song may be introduced with a DJ introduction, the song is then played, and is followed by an advertisement, a weather report, and then another song may be introduced and played. Where there is a choice of DJ's, each available DJ may be

associated with a different algorithm for deciding which item, such as a song, will be played will be next. The user may optionally choose not to include any DJ introductions in the virtual broadcast.

More sophisticated algorithms for organizing the virtual broadcast may be substituted. For example, algorithms for selecting content and advertising could be influenced by external triggers, such as the time of day (*e.g.*, restaurant ads at lunch, faster music in the afternoon), motion (*e.g.*, user movement could trigger music with a more prominent beat, car travel could trigger ads for new cars (car movement would be determined by any available means, such as by a Global Positioning System, GPS, cross-correlated with publicly-available maps)), localized low power radio transmitters (*e.g.*, walking by a chain store triggers an ad for that chain store), or other factors. Urgent breaking news, such as a weather warning or a stock price alert, could be transmitted as a relatively small amount of raw data to device 10 from the Web site, if a connection can be established, and interrupt the broadcast as though the broadcast were live. By transmitting only a small amount of data, such as, for example, a possible 8 bytes for a stock quote, and by having a synthesized or prerecorded voice read the stock quote, as opposed to capturing a large amount of data required for a stock quote read by a live reporter and transmitted over a conventional radio broadcast, a high fidelity broadcast of urgent breaking news can be incorporated into the virtual broadcast even if poor quality network conditions only permit a limited data throughput. Certain dated information like the weather information can be discarded automatically after a period of time.

While the broadcast may just cut from segment to segment, complex transitioning techniques can be used to transition between segments of the broadcast such as fades, cross-cuts, wipes, etc. For example, one song may start before another one ends, or an advertisement could fade into a song or be played during the song. DJ algorithms could effect complex transitions between pieces of music for more effective mixing. Using even more sophisticated algorithms, software on device 10 can be programmed to generate the automated "mixing" of songs by processing multiple pieces of music at the same time and weaving those songs into a broadcast at device 10.

The user starts playing the broadcast by pressing a "play" button, included as one of buttons 40, and may repeat, skip, or move forward or backward in the broadcast, and may perform other functions for controlling the broadcast either with a dedicated button for that particular function or with the buttons provided in combination with menus on display 20.

During or after the original broadcast, the user can make adjustments to the broadcast to suit his preferences at step 140. In a radio broadcast, individual songs can be marked by the user for deletion, promoted to a "favorite song" status to play that song more often, or may be ranked by the user. The ranking influences the probability of playing a particular song. For example, the top ranked song might be played two or three times in one hour, while the 40th ranked song might play only once a day. During the next connection between the device and the Web site, the user ranking is uploaded to the Web site, allowing the collection of demographic information about the listeners, both as individuals and collectively. During this same connection, if there is new content available, the lowest ranking songs can be deleted from the bottom of the

list to be replaced with the new material. New advertising may be downloaded at that time as well. The marking of songs for deletion or promotion to "favorite song" status and the ranking of songs may be accomplished by displaying the names of the songs on screen 30 and buttons 40 can then be used to manipulate the songs as desired. Alternatively, certain buttons 40 could be designated to perform individual functions such as marking a favorite song or deleting a song while the song is playing.

The device 10 used to practice the invention, such as an MP3 player, may be used both for the broadcast of a virtual radio or television station to be maintained in a portion of the device and may be used at the same time to play individual items of content, such as songs, specifically selected for download by the user.

The invention offers many advantages over a traditional radio broadcast. It allows a user to receive a simulated broadcast which can be enjoyed passively without the user having to select the precise content. The user can optionally control the broadcast by, for example, rating individual songs, but need not exercise this control. It also provides the user with a virtual radio broadcast when a favorite radio station is unavailable, such as in an airplane (where a player that does not interfere with the aviation equipment and communications is required) or in a foreign city. The virtual broadcast is immune to radio interference since the data is digitally downloaded and processed for error correction before presentation to the user. The user can enjoy the content at a possibly reduced cost due to advertising. Logs of the user's listening history can also be uploaded at step 140 to provide accurate demographic information for these advertisers and can be

used to determine a fair distribution of royalties on a precise basis, such as per song, or, more generally, per-item of content downloaded or played.

In another aspect of the present invention, one may generate a virtual television-style broadcast of continuously available news programming. In this implementation, illustrated in FIG. 4, files containing the latest news stories are downloaded initially from a Web site on the Internet 20 to device 10 at step 200 or are broadcast over a subsignal of a conventional television broadcast (not shown). Also downloaded are files containing "information" such as introductions to the news stories, weather reports, stock quotes, etc. and advertising. Software on device 10 then weaves the news stories, news story introductions and additional information into a virtual news broadcast or "newscast" using an algorithm programmed into device 10 for viewing, at step 210, on screen 50. In one such algorithm, each news story is preceded by the appropriate introduction and advertising is played after every few news stories. In addition, various items such as stock information, weather reports, and news headlines, may be streamed across separate areas of the screen 50. After the initial broadcast, at step 220, the future newscast may be periodically updated at regular intervals by deleting old news stories and obtaining updates to existing news stories or new news stories by download from the appropriate Web site or from the subsignal of the conventional television broadcast. Generally, these updates, if performed often enough, such as once every half-hour, which is particularly feasible with a wireless Internet connection, will only require incremental changes as compared to the content to be included in a broadcast and will therefore require only a small proportion of the bandwidth of a full-streaming Internet connection. At step 230, the revised virtual television-style news broadcast may be

viewed on screen 50. To save time, the user could skip over stories that have already been viewed. Rather than implementing this embodiment on a portable device, it may be more appropriate to implement this embodiment on a device mounted in an airport or other location where repetitive newscasts are appropriate.

Thus, while there have shown and described and pointed out fundamental novel features of the invention as applied to a preferred embodiment thereof, it will be understood that various omissions and substitutions and changes in the form and details of the devices illustrated, and in their operation, may be made by those skilled in the art without departing from the spirit of the invention. For example, it is expressly intended that all combinations of those elements and/or method steps which perform substantially the same function in substantially the same way to achieve the same results are within the scope of the invention. Moreover, it should be recognized that structures and/or elements and/or method steps shown and/or described in connection with any disclosed form or embodiment of the invention may be incorporated in any other disclosed or described or suggested form or embodiment as a general matter of design choice.

CLAIMS

I claim:

1. 1. A method for generating a virtual broadcast on a virtual broadcast device, the method comprising:

downloading and storing data comprising content and other information to be integrated into the virtual broadcast from a Web site to the virtual broadcast device in any order; and

organizing the data on the virtual broadcast device into a particular order for the virtual broadcast according to a selected algorithm provided on the virtual broadcast device.

2. The method of claim 1 further comprising playing the virtual broadcast on the virtual broadcast device.

3. The method of claim 1 further comprising connecting intermittently to the Web site for downloading the data.

4. The method of claim 1 further comprising selecting the data to be downloaded based on user preferences.

5. The method of claim 1 further comprising downloading advertising from the Web site and inserting the advertising into the virtual broadcast.

6. The method of claim 1 wherein the content is comprised of a plurality of items and the information comprises a plurality of introductions related to the items of content and said step of organizing the virtual broadcast comprises introducing each of the plurality of items of content with a related of said introductions.

7. The method of claim 6 wherein the content comprises a plurality of songs and the virtual broadcast is a virtual radio broadcast.

8. The method of claim 7 further comprising processing more than one song at the same time.

9. The method of claim 1 wherein the content comprises a plurality of songs and the method further comprises selecting one of the songs, and marking the selected song as either a user favorite or for deletion.

10. The method of claim 1 wherein the content comprises a plurality of songs and the method further comprises selecting one of the songs, and ranking a selected song according to user preference.

11. The method of claim 10 further comprising playing the virtual broadcast and then returning to the Web site, uploading from the virtual broadcast device to the Web site the

user ranking of the selected song, and downloading additional content and additional other information to update the virtual broadcast on the basis of the user ranking.

12. The method of claim 1 wherein the virtual broadcast device is portable.

13. The method of claim 1 wherein the virtual broadcast device is a mobile phone and the method further comprises connecting the mobile phone to the Web site over a wireless connection.

14. A method for generating a virtual broadcast on a virtual broadcast device, the method comprising:

capturing in the virtual broadcast device a signal generated by conventional broadcast means, the signal comprising content and other information to be integrated into the virtual broadcast and transmitted by the conventional broadcast means in any order; and

organizing the captured content and other information on the virtual broadcast device into a particular order for the virtual broadcast according to a selected algorithm provided on the virtual broadcast device.

15. The method of claim 14 further comprising playing the virtual broadcast on the virtual broadcast device.

16. The method of claim 14 further comprising downloading advertising from the Web site and inserting the advertising into the virtual broadcast.

17. The method of claim 14 wherein the content is comprised of a plurality of songs, the information comprises DJ introductions to the songs and the virtual broadcast is a virtual radio broadcast.

18. The method of claim 14 wherein the virtual broadcast device is portable.

19. The method of claim 14 where the virtual broadcast device is a mobile phone and the method further comprises connecting the mobile phone to the Web site over a wireless connection.

20. A method for generating a virtual television broadcast on a virtual television broadcast device, the method comprising:

downloading and storing files comprising a plurality of news stories and other information to be integrated in the virtual television broadcast from a Web site to the virtual television broadcast device in any order;

organizing the stored content and other information on the virtual television broadcast device into a particular order for the virtual broadcast according to a selected algorithm provided on the virtual television broadcast device;

periodically downloading an additional news story from the Web site; and

generating an updated virtual television broadcast that includes the additional news story.

21. The method of claim 20 further comprising deleting an old news story from the plurality of news stories from the virtual television broadcast device.

22. The method of claim 20 wherein the virtual television broadcast and the revised television broadcast display both news and other information at the same time on different portions of a screen on the virtual television broadcast device.

23. A method for generating a virtual television broadcast on a virtual television broadcast device, the method comprising:

capturing in the virtual television broadcast device a signal generated by a conventional broadcast means, the signal comprising video of a plurality of news stories and other information to be integrated into the virtual television broadcast and transmitted by the conventional broadcast means in any order; and

organizing the content and other information on the virtual television broadcast device into a particular order for the virtual broadcast according to a selected algorithm provided on the virtual television broadcast device;

periodically downloading an additional news story from the Web site and generating an updated virtual television broadcast that includes the additional news story.

24. The method of claim 23 further comprising deleting an old news story from the plurality of news stories from the virtual television broadcast device.

25. The method of claim 23 wherein the virtual television broadcast and the revised television broadcast display both news and other information at the same time on different portions of a screen on the virtual television broadcast device.

26. A device for generating a virtual broadcast, the device comprising:

a memory;

means for inputting data, comprising content and other information to be integrated into the virtual broadcast, to be stored in the memory; and

means for organizing the data into a particular order for the virtual broadcast according to a specific algorithm provided on the device.

27. The device of claim 26 wherein the data further comprises advertising and said organizing means comprises means for integrating the advertising into the virtual broadcast.

28. The device of claim 26 further comprising means for playing the generated virtual broadcast.

29. The device of claim 26 further comprising means for obtaining the data from a Web site.

30. The device of claim 29 further comprising means for uploading user preferences for the data, including data type, to the Web site.

31. The device of claim 29 wherein the content comprises a plurality of items and the device further comprises means for uploading to the Web site, after playing an initial virtual broadcast comprising the data, user rankings of the items to be used in determining future data to be downloaded from the Web site to the device.

32. The device of claim 26 further comprising means for deleting a portion of the data.

33. The device of claim 26 further comprising means for marking a portion of the data as a user favorite.

34. The device of claim 26 further comprising means for obtaining the data from a signal generated by a conventional broadcasting means.

35. The device of claim 26 wherein the content comprises music and the information comprises introductions to the music.

36. The device of claim 26 wherein the content comprises videos and the device further comprises a video screen.

37. The device of claim 26 wherein the device has a wireless connection to the Internet.

38. The device of claim 37 wherein the device is a mobile phone.

39. The device of claim 37 further comprising means for processing more than one song at the same time.

40. A device for generating a virtual television broadcast, the device comprising:

a memory;

means for inputting data, comprising video of a plurality of news stories and other information to be integrated into the virtual television broadcast, to be stored in the memory;

means for organizing the data into the virtual broadcast comprising the news stories interspersed with the other information according to a specific algorithm provided on the device; and

means for periodically inputting an additional news story and generating an updated virtual television broadcast by including the additional news story in a revised television broadcast.

ABSTRACT OF THE DISCLOSURE

method for generating a virtual radio or television broadcast by downloading data, including content, information, and advertising, in any order from a Web site on the Internet. The data is downloaded to a device that is preferably portable, such an MP3 player or a mobile phone, and can be connected intermittently to the Internet over a wireless connection. Software loaded on the device uses an algorithm, specified by a user or otherwise, to organize the downloaded data into a particular order, such as into a conventional radio or television-style broadcast format. User data and preferences can also be uploaded to the Web site to influence the type of data that is downloaded. A virtual periodically-updated newscast can be similarly generated.

DO NOT ENTER

D9547B9E4 - 020808

FIG. 1(a)

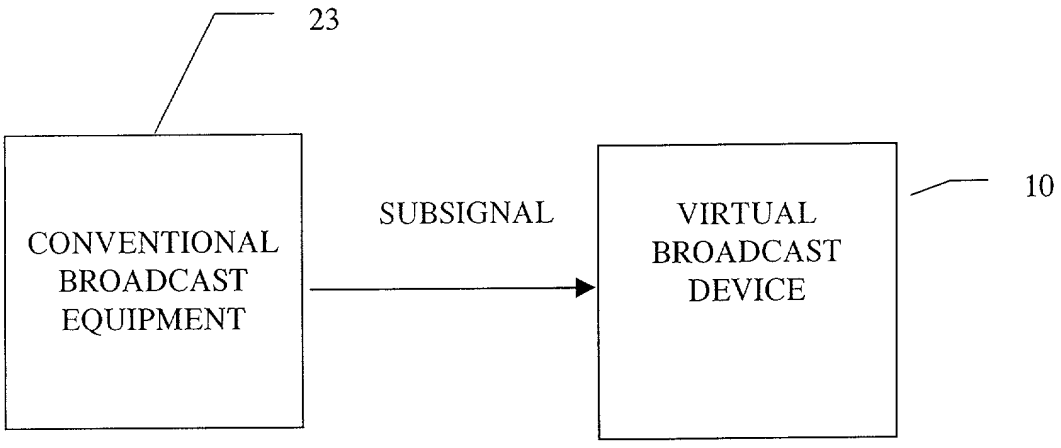

FIG. 1(b)

Document: 2005/0194600

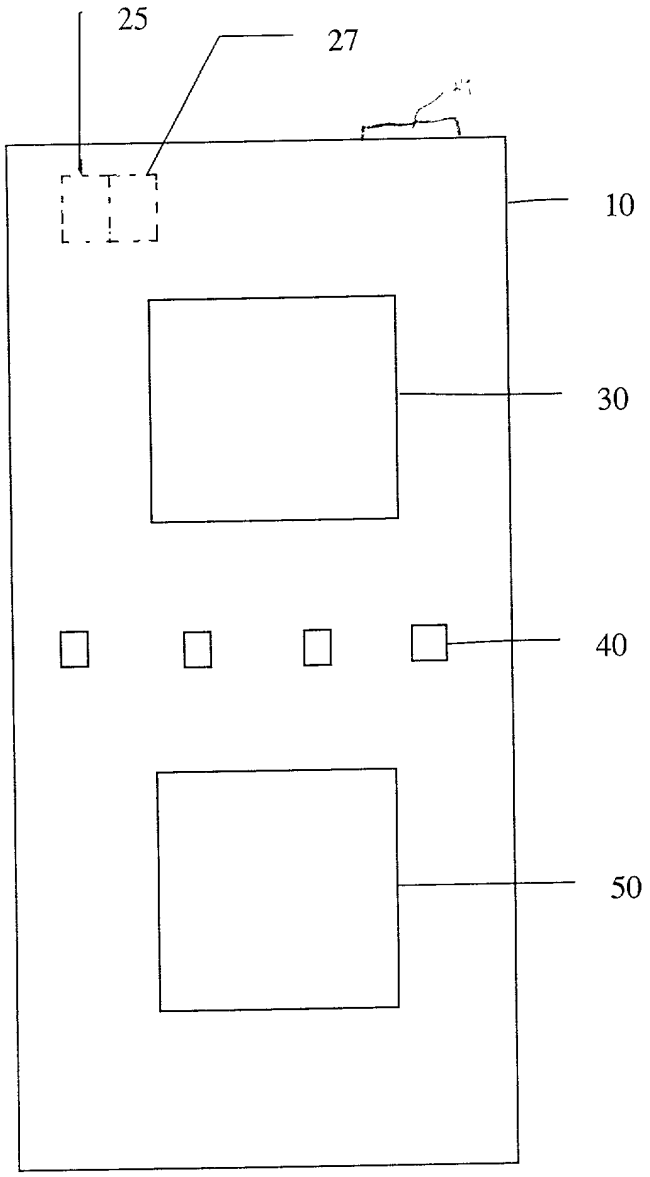

FIG. 2

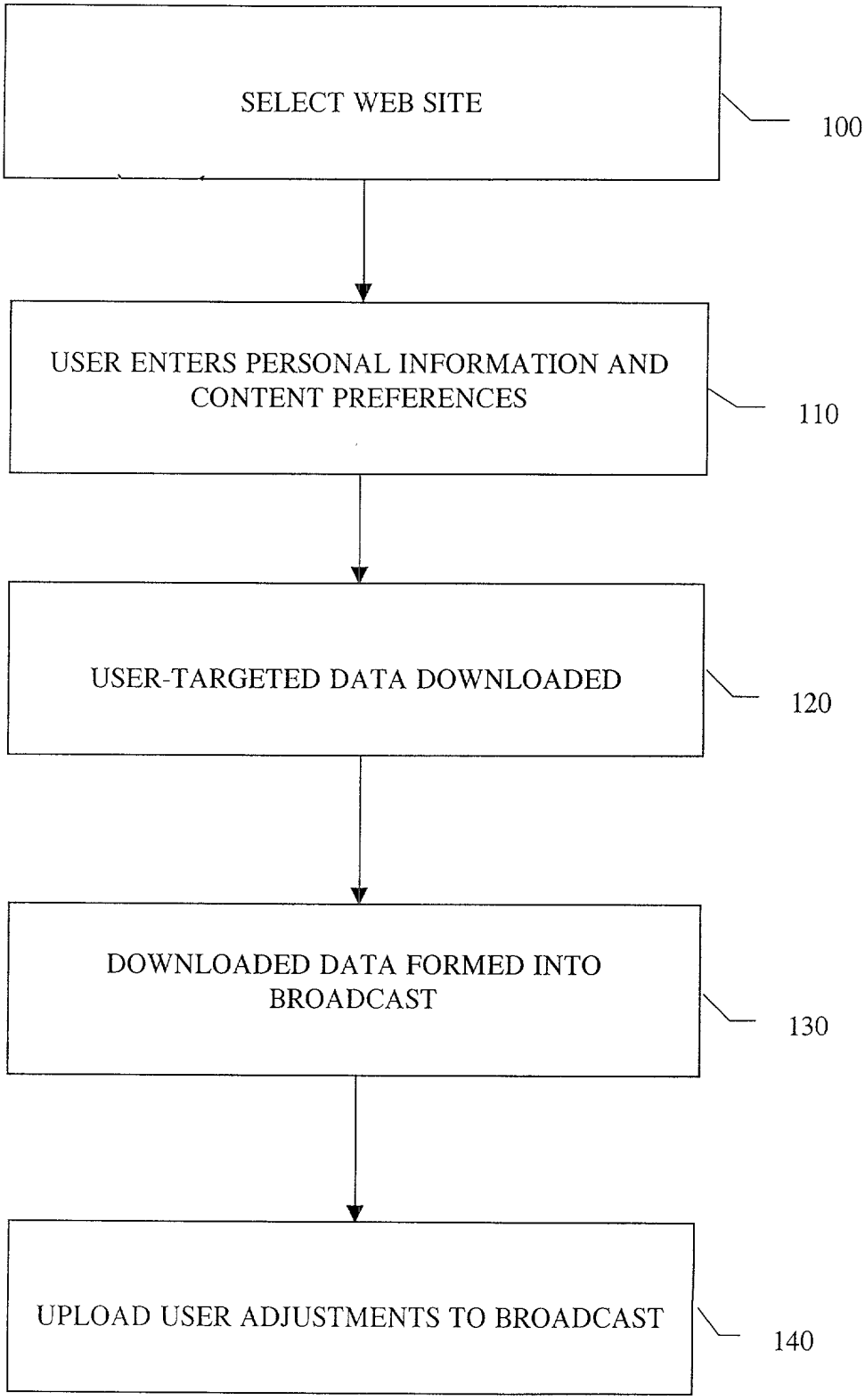
SELECT WEB SITE
100
USER ENTERS PERSONAL INFORMATION AND CONTENT PREFERENCES
110
USER-TARGETED DATA DOWNLOADED
120
DOWNLOADED DATA FORMED INTO BROADCAST
130
UPLOAD USER ADJUSTMENTS TO BROADCAST
140

FIG. 3

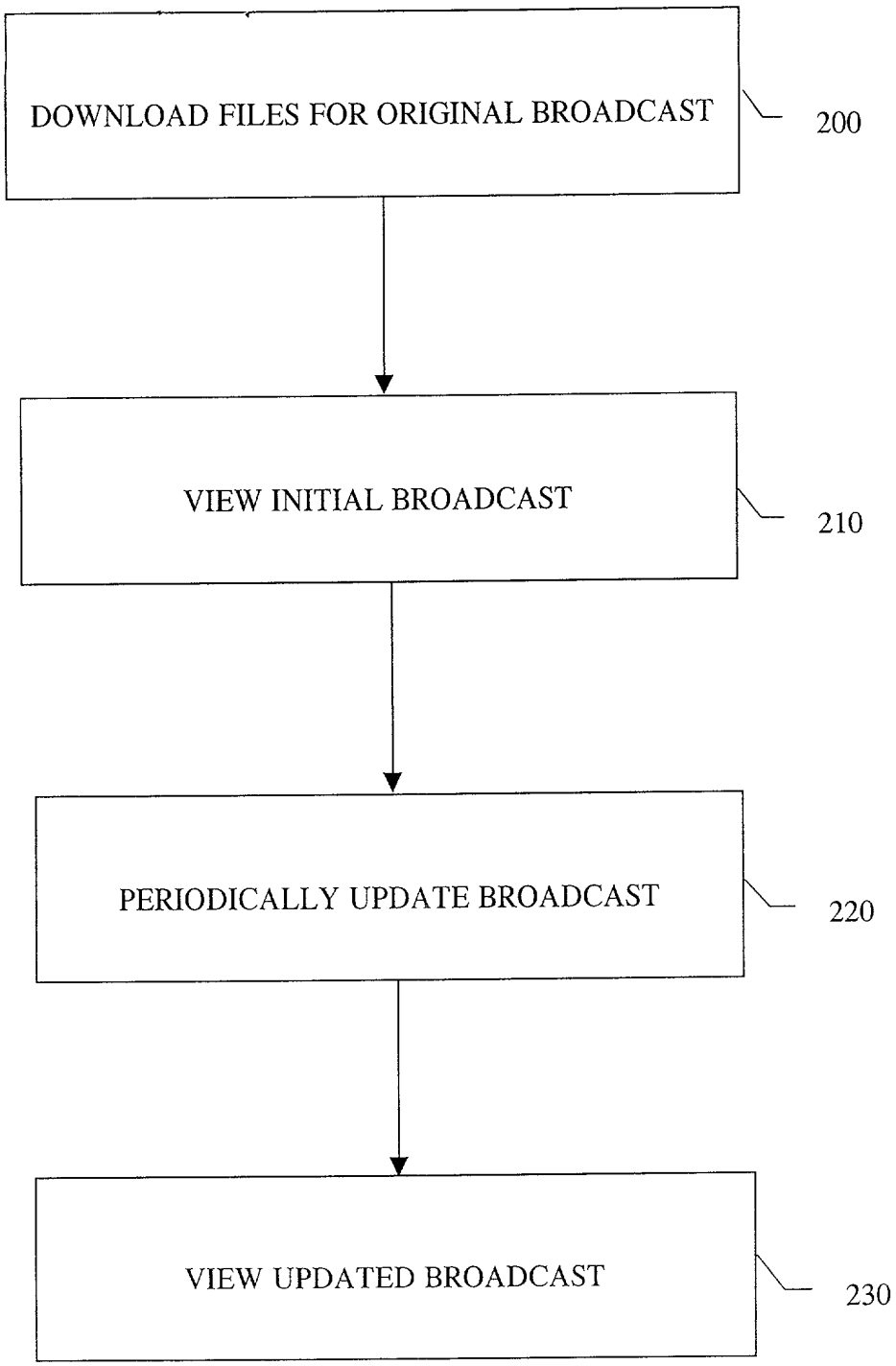
DOWNLOAD FILES FOR ORIGINAL BROADCAST
200
VIEW INITIAL BROADCAST
210
PERIODICALLY UPDATE BROADCAST
220
VIEW UPDATED BROADCAST
230

FIG. 4

By Express Mail
No. EL331511719US

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

CACHE DEVICE AND METHOD FOR GENERATING A VIRTUAL RADIO OR TELEVISION BROADCAST

the specification of which is attached hereto.

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I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I also acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37 CFR 1.63(d), which occurred between the filing date of the prior application and the filing date of the continuation-in-part application, if this is a continuation-in-part application.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application: **Country:**
Appln. No.:
Filed:

I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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